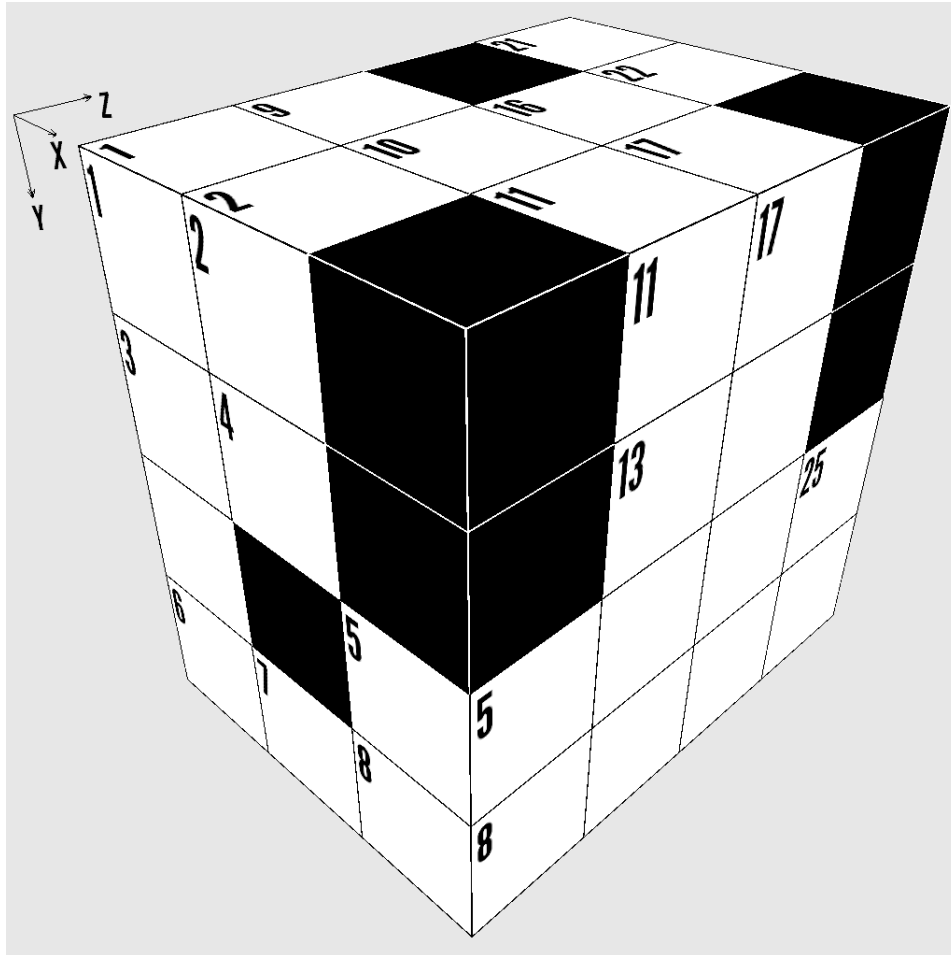


Difficulty: ★★☆☆☆

3D Math Puzzle - 3x4x4 Box 61



This puzzle is like a crossword, but with numbers. Each digit occupies a 3D block and can be a part of a "word" in the X, Y, and Z directions.

Rules:

1. "Words" may not start with a zero.
2. "Words" read from:
 - a. X Direction: Left to right
 - b. Y Direction: Top to bottom
 - c. Z Direction: Front to back
3. There is one unique solution which satisfies all the clues given below.
4. Some "words" may not have clues. They will be determined by the "words" which intersect them.

If we take the cube pictured above and divide it into individual X-Y layers, we will get these planes:

1	2		9	10	11		16	17	21	22	
3	4		12		13	18			23		
		5		14		19			24		25
6	7	8	15			20			26		

Clues:

X Direction

- 1 Digits are in consecutive order
- 3 Two-thirds of Y5
- 6 Is a prime number
- 9 Last two digits are the same as X21
- 12 Last two digits are the same as last two digits of X19
- 14 Digits are the same as last two digits of X15
- 15 Twelve times Y2
- 16 Y2 minus X21
- 18 Nine times X21
- 19 Sixteen times X21
- 20 Twice X23
- 21 Is a prime number
- 23 Average of Y5 and Z13
- 24 Digits are the same as last three digits of Y21
- 26 Is a prime number

Y Direction

- 1 Forty-seven times X6
- 2 Average of X1 and Y9
- 5 Z11 reversed
- 9 Digits are the same as last two digits of Z7
- 10 X26 plus Y18
- 11 Is a square
- 16 Last two digits are the same as last two digits of X12
- 17 Sixty times X6
- 18 Is a square
- 21 Is a prime number
- 22 Thirty-six times Y9
- 25 Is a prime number

Z Direction

- 1 Same as X1
- 2 Last three digits are the same as X6
- 3 Is a prime number
- 4 First two digits are the same as first two digits of X19
- 5 Three times a prime number
- 6 First two digits are the same as first two digits of Y21
- 7 Twenty-two times a prime number
- 8 Is a prime number
- 11 Half of X1
- 13 X1 reversed
- 14 Is a prime number
- 19 Is a prime number

Solution is on next page

Solution:

7	8	
6	2	
6		9
1	6	3

8	1	3
6	0	8
	8	4
9	8	4

	6	9
1	1	7
2	0	8
1	8	0

1	3	
9	0	
9	9	9
9	6	7